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WHAT IS CLAIMED IS:

1. An automatic door latch comprising:
 - a housing;
 - a latch retractably mounted in the housing and movable to an extended position, a partially retracted position, and a fully retracted position;
 - a spring biasing the latch toward the extended position;
 - an actuator for moving the latch to the fully retracted position;
 - a contact member mounted on the latch; and
 - a multi-position switch mounted on the housing in releasable contact with the contact member for allowing the latch to move to the extended position when the multi-position switch is in a first position, and for holding the latch in the partially retracted position when the multi-position switch is in a second position.
2. The automatic door latch of Claim 1, wherein the latch comprises a dead bolt.
3. The automatic door latch of Claim 2, wherein the dead bolt comprises a substantially solid piece of metal.
4. The automatic door latch of Claim 2, wherein when the dead bolt is in the extended position, the portion of the dead bolt extending from the housing comprises a solid piece of metal.
5. The automatic door latch of Claim 2, wherein the dead bolt comprises a substantially symmetrical curved tip.
6. The automatic door latch of Claim 1, wherein the actuator comprises a rotatable swing arm pivotally mounted in the housing engaging the latch.

7. The automatic door latch of Claim 6, wherein the swing arm engages a projection mounted on the latch.

8. The automatic door latch of Claim 7, wherein the swing arm is received in a slot in the projection.

9. The automatic door latch of Claim 7, wherein the projection comprises a pin extending from the projection which is slidably received in at least one slot extending through the housing.

10. The automatic door latch of Claim 1, wherein the contact member is mounted inside the housing.

11. The automatic door latch of Claim 1, wherein the contact member comprises a contact surface in releasable sliding engagement with the multi-position switch.

12. The automatic door latch of Claim 11, wherein the contact surface is substantially planar.

13. The automatic door latch of Claim 12, wherein the contact surface extends in a plane that is not parallel with the extension direction of the latch.

14. The automatic door latch of Claim 11, wherein the contact member further comprises a retainer in releasable contact with the multi-position switch.

15. The automatic door latch of Claim 14, wherein the retainer comprises a substantially planar surface which extends in a plane that is substantially perpendicular to the extension direction of the latch.

16. The automatic door latch of Claim 14, wherein the contact surface and the retainer are substantially planar and are connected together at an angle of less than 90 degrees.

17. The automatic door latch of Claim 1, wherein the multi-position switch is mounted inside the housing.

18. The automatic door latch of Claim 1, wherein the multi-position switch comprises an extension in releasable contact with the contact member.

19. The automatic door latch of Claim 18, wherein the extension is movable in a linear direction from the first position to the second position.

20. The automatic door latch of Claim 19, wherein the extension is retractably mounted in a housing of the multi-position switch, and the extension is movable to an extended position in relation to the housing which corresponds to the second position.

21. The automatic door latch of Claim 20, wherein the extension is movable to an intermediate position in relation to the housing which corresponds to the first position.

22. The automatic door latch of Claim 19, wherein the linear direction is not parallel with the extension direction of the latch.

23. The automatic door latch of Claim 19, wherein the linear direction is substantially perpendicular to the extension direction of the latch.

24. The automatic door latch of Claim 1, wherein the latch comprises a dead bolt and the contact member and multi-position switch are mounted inside the housing.

25. The automatic door latch of Claim 1, wherein the latch comprises a dead bolt and the automatic door latch is adapted for installation in a standard predrilled dead bolt lock cut-out in a door.

26. The automatic door latch of Claim 1, wherein the automatic door latch is adapted for installation in both a righthand and a lefthand door.

27. The automatic door latch of Claim 1, further comprising restraint assembly means for manually securing the latch in the fully retracted position.

28. An automatic door latch comprising:
a housing adapted for mounting in a door;
a latch retractably mounted in the housing and movable to an extended position, a partially retracted trigger position, and a fully retracted position;
a spring biasing the latch toward the extended position; and
means mounted inside the housing for holding the latch in the partially retracted trigger position when the door is open, and for allowing the latch to move to the extended position when the door is closed.

29. The automatic door latch of Claim 28, wherein the latch is a dead bolt.

30. The automatic door latch of Claim 28, wherein the means for holding the latch in the partially retracted trigger position and for allowing the latch to move to the extended position comprises:

a contact member mounted on the latch; and

a multi-position switch mounted on the housing in releasable contact with the contact member.

31. The automatic door latch of Claim 30, wherein the contact member and multi-position switch comprise means for allowing the latch to move to the extended position when the multi-position switch is in a first position, and for holding the latch in the partially retracted trigger position when the multi-position switch is in a second position.

32. The automatic door latch of Claim 28, further comprising means for installing the automatic door latch in a standard predrilled dead bolt lock cut-out in the door.

33. The automatic door latch of Claim 28, further comprising means for installing the automatic door latch in both a righthand and a lefthand door.

34. The automatic door latch of Claim 28, further comprising restraint assembly means for manually securing the latch in the fully retracted position.

Sud B1 35. An automatic door latch restraint assembly comprising:
an automatic door latch including a first latch movable to an extended position, a partially retracted position and a fully retracted position, and a first spring biasing the first latch toward the extended position; and
restraint means including a second latch for manually securing the first latch in the fully retracted position.

36. The automatic door latch restraint assembly of Claim 35, wherein the automatic door latch comprises actuator bar means for manually retracting the latch to the fully retracted position upon rotation of the actuator bar means, and the restraint means comprises means for substantially preventing rotation of the actuator bar means when the first latch is in the fully retracted position.

~~37. The automatic door latch restraint assembly of Claim 36,
wherein the restraint means comprises a keeper mounted for rotation with the
actuator bar means which receives the second latch when the first latch is in the
fully retracted position.~~

Sub ct 38. The automatic door latch restraint assembly of Claim 37,
further comprising a manually operable button connected to the second latch for
inserting the second latch into the keeper.

39. The automatic door latch restraint assembly of Claim 38,
further comprising a second spring biasing the second latch and button away from
engagement with the keeper.

40. The automatic door latch restraint assembly of Claim 39, further comprising means for counteracting the biasing force of the second spring when the second latch is inserted in the keeper.

41. The automatic door latch restraint assembly of Claim 40, wherein the means for counteracting the biasing force of the second spring comprises a thin leaf spring in contact with the second latch.

42. The automatic door latch restraint assembly of Claim 35, wherein the first latch is a dead bolt.

